

Please enter the following amendments and remarks:

**AMENDMENT TO THE CLAIMS**

Claim 1. (original) A transdermal substance delivery device, comprising:  
at least one ultrasonic transducer for generating at least one ultrasonic transmission  
for inducing movement of at least one substance into a tissue;  
~~said at least one ultrasonic transmission and~~ at least one sensor positioned with said  
at least one transducer to ~~sense reflected~~ receive ultrasonic transmissions reflected from said tissue  
or said at least one substance; and  
wherein, said ~~sensed~~ reflected ultrasonic transmissions received by said at least one  
sensor are indicative of substance actually moved into said tissue.

Claim 2. (original) The transdermal substance delivery device of claim 1, wherein said  
ultrasound has a frequency in the range of about 20 KHz to 30 MHz.

Claim 3. (original) The transdermal substance delivery device of claim 1, wherein said  
ultrasonic transmission has an intensity of about 125-mW/sq. cm to 3.0 W/sq. cm.

Claim 4. (original) The transdermal substance delivery device of claim 1, wherein said  
ultrasound utilizes an alternating waveform.

Claim 5. (original) The transdermal substance delivery device of claim 4, wherein said alternating waveform comprises a sawtooth waveform.

Claim 6. (original) The transdermal substance delivery device of claim 4, wherein said alternating waveform comprises a square waveform.

Claim 7. (original) The transdermal substance delivery device of claim 1, wherein said ultrasound is applied substantially continuously.

Claim 8. (original) The transdermal substance delivery device of claim 1, wherein said ultrasound is pulsed.

Claim 9. (original) The transdermal substance delivery device of claim 1, further comprising a control device.

Claim 10. (original) A method for transdermal substance delivery, comprising:

placing at least one substance substantially adjacent to the external surface of a tissue;

generating at least one ultrasonic transmission from at least one ultrasonic transducer for inducing transdermal delivery ~~movement~~ of said at least one substance into a said tissue;

positioning ~~said at least one ultrasonic transmission and~~ at least one sensor ~~positioned~~ with said at least one transducer to sense ~~reflected~~ ultrasonic transmissions reflected from either said tissue or said at least one substance; and

wherein, said ~~sensed~~ reflected ultrasonic transmissions received by said at least one sensor are indicative of substance actually moved into said tissue.

Claim 11. (original) The method of claim 10, wherein said ultrasonic transmission has a frequency in the range of about 20 KHz to 30 MHz.

Claim 12. (original) The method of claim 10, wherein said ultrasonic transmission has an intensity of about 125-mW/sq. cm to 3.0 W/sq. cm.

Claim 13. (original) The method of claim 10, wherein said ultrasonic transmission utilizes an alternating waveform.

Claim 14. (original) The method of claim 13, wherein said alternating waveform comprises a sawtooth waveform.

Claim 15. (original) The method of claim 13, wherein said alternating waveform comprises a square waveform.

Claim 16. (original) The method of claim 10, wherein said ultrasonic transmission is applied substantially continuously.

Claim 17. (original) The method of claim 10, wherein said ultrasonic transmission is pulsed.

Claim 18. (original) The method of claim 10, further comprising a control device.

Claim 19. (new) The transdermal substance delivery device of claim 9, wherein said control device measures the amount of said at least one substance delivered into said tissue based on said reflected ultrasonic transmissions received by said at least one sensor.

Claim 20. (new) The method of claim 18, wherein said control device measures the amount of said at least one substance delivered into said tissue based on said reflected ultrasonic transmissions received by said at least one sensor.